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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,121	06/30/2003	Zeev Sperber	P-5615-US	2983

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EXAMINER	
TREAT, WILLIAM M	

ART UNIT	PAPER NUMBER
2181	

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/608,121	SPERBER ET AL.	
	Examiner	Art Unit	
	William M. Treat	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *13-15* is/are allowed.

6)☒ Claim(s) *1,4-8,10,11,16-19,22-25 and 28-34* is/are rejected.

7)☒ Claim(s) *2,3,9,12,20,21,26,27,35 and 36* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-36 are presented for examination.

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 31-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 31-33 claim "an article comprising a storage medium having stored thereon instructions". This is not a machine-readable medium but may only be a computer printout of a program which is not patentable subject matter.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 4-8, 10-11, 16-18, 22-24, 29, and 31-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 1, 7-8, 10-11, and 34 recite "enabling renaming" without making clear what constitutes "enabling". A word like "enable" is so all-encompassing as to make it impossible to determine the metes and bounds of applicants' claim language.

8. Claims 1, 7-8, 10-11, 16-18, 22, 24, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the one or more new micro-operations, which are inserted into the

sequence of micro-operations that includes the particular micro-operation, to merge the values into a single register.

9. Claims 23 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element is: the one or more new micro-operations merge the values into a single register.

10. In the absence of any language limiting the function of the micro-operations in claims 23 and 29, one cannot determine the metes and bounds of applicants' claim language.

11. Claims 4-6 and 31-33 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted element is: the functionality of the system (i.e., renaming of a source of a particular micro-operation even though two or more pointers - each currently indicating where values of a respective group of bits of said source will be found when said particular micro-operation is executed - do not all point to the same register).

12. In the absence of any language limiting the function of the micro-operations in claims 4-6 and 31-33, one cannot determine the metes and bounds of applicants' claim language. Surely, applicants realize instructions which concatenate/merge two or more values are well-known in the art as is how one might insert such instructions into a sequence of microinstructions. The absence of any enablement other than the mention of these tasks means applicants are depending on those of ordinary skill to already

know how to implement the merging and insertion. Applicants' disclosure only points to a function such as mentioned in paragraph 11, *supra*. There is no discussion of other purposes for the merge-related micro-operations and the insertion of them.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 19, 22, and 24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Colwell et al. (Patent No. 5,471,633).

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 25, 28, and 30 rejected under 35 U.S.C. 103(a) as being unpatentable over Colwell et al. (Patent No. 5,471,633) in view of Nguyen (Patent No. 6,560,083).

18. Colwell taught the invention of exemplary claim 25, substantially as claimed, including an apparatus comprising: a processor including at least: an architectural register; and a register tracking mechanism to maintain pointers that indicate where results of micro-operations, that are to be written to said architectural register upon retirement, will be stored when said micro-operations are executed, wherein said pointers include a pointer that indicates where results of a most recently allocated micro-operation that writes to all bits of said architectural register upon retirement will be stored when said micro-operation is executed (Summary of the Invention).

19. Colwell did not teach his system comprises a voltage monitor. However, Nguyen taught an appropriate voltage monitor for a system such as Colwell's and that such a voltage monitor would be useful, for laptop computer systems employing Colwell's invention, to prevent transients that occur due to switching of supply sources (Background Information and col. 1, line 65 through col. 2, line 5).

20. As to claims 28 and 30, Colwell taught their limitations (Summary of the Invention) except for the voltage monitor which was taught by Nguyen (see paragraph 19, *supra*).

21. Claims 2-3, 9, 12, 20-21, 26-27, and 35-36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

22. Claims 13-15 are allowable over the prior art of record.

23. Any inquiry concerning this communication should be directed to William M. Treat at telephone number (571) 272-4175. The examiner works at home on Wednesdays but may normally be reached on Wednesdays by leaving a voice message using his office phone number. The examiner also works a flexible schedule but may normally be reached in the afternoon and evening on three of the four remaining weekdays.

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WILLIAM M. TREAT
PRIMARY EXAMINER